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<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER 095309.55994US U.S. APPLICATION NO. (If known, see 37 CFR 1.51) <b>10/527439</b>	
INTERNATIONAL APPLICATION NO. <b>PCT/EP2003/009415</b>	INTERNATIONAL FILING DATE <b>26 August 2003 (26.08.2003)</b>	PRIORITY DATE CLAIMED <b>12 September 2002 (12.09.2002)</b>	
TITLE OF INVENTION <b>METHOD FOR DETERMINING A CHANGE IN A VOLUMETRIC EFFICIENCY FOR AN INTERNAL COMBUSTION ENGINE</b>			
APPLICANT(S) FOR DO/EO/US <b>Christian BARBA, Martin DIETZ and Guenter MOLL</b>			
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:			
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))               <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> Is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).               <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))               <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol>			
<b>Items 11 to 20 below concern document(s) or information included:</b>			
<ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> A preliminary amendment.</li> <li>14. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>15. <input checked="" type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> <li>20. <input checked="" type="checkbox"/> Other items or information: Two (2) sheets of drawings showing Figures 1-2; International Search Report and translation of relevant portions thereof; Forms PCT/IB/304 and PCT/IB/308; First page of Published International Application (WO 2004/033881 A1)</li> </ol>			

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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U.S. APPLICATION NO. (if known, see 37 CFR 1.45) <b>10/527439</b>		INTERNATIONAL APPLICATION NO. <b>PCT/EP2003/009415</b>		ATTORNEY'S DOCKET NUMBER <b>095309.55994US</b>	
The following fees have been submitted				CALCULATIONS PTO USE ONLY	
21.	<input checked="" type="checkbox"/>	Basic national fee .....		<b>\$300.00</b>	
22.	<input checked="" type="checkbox"/>	Examination fee			
If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4) .....				<b>\$100.00</b>	
All other situations.....				<b>\$200.00</b>	
23.	<input checked="" type="checkbox"/>	Search fee			
Search fee (37 CFR 1.44(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority .....				<b>\$100</b>	
International Search Report prepared and provided to the Office .....				<b>\$400</b>	
All other situations.....				<b>\$500</b>	
<b>TOTAL OF 21, 22 AND 23 =</b>				<b>\$900.00</b>	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)		RATE	
23 - 100	/ 50 =			x 250	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(h)).				<b>\$130.00</b>	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	9 - 20		x 50		
Independent claims	2 - 3		x 200		
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ 360		
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$</b>	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.					
<b>SUBTOTAL =</b>				<b>\$1,030.00</b>	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				<b>\$</b>	
<b>TOTAL NATIONAL FEE =</b>				<b>\$1,030.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21 (h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property .....				<b>\$</b>	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$</b>	
				Amount to be refunded:	\$
				Amount to be charged:	\$
a. <input checked="" type="checkbox"/> A check in the amount of \$1,030.00 to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. 05-1323 (Attorney Docket No. ) in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 05-1323 (Attorney Docket No. 095309.55994US). A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
<b>NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.</b>					
SEND ALL CORRESPONDENCE TO: Crowell & Moring, LLP Intellectual Property Group P.O. Box 14300 Washington, D.C. 20044-4300 Tel. No. (202) 624-2500 Fax No. (202) 628-8844			SIGNATURE  NAME <b>Gary R. Edwards</b> 31,824 REGISTRATION NUMBER <b>March 11, 2005</b> DATE		

GRE:kms

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : Confirmation No. :  
First Named Inventor : Christian BARBA  
Filed : March 11, 2005  
TC/A.U. :  
Examiner :  
  
Docket No. : 095309.55994US  
Customer No. : 23911  
  
Title : Method For Determining a Change In Volumetric  
Efficiency for an Internal Combustion Engine

SUBMISSION OF SUBSTITUTE SPECIFICATION


Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

March 11, 2005

Sir:

Attached are a Substitute Specification and a marked-up copy of the original specification. I certify that said substitute specification contains no new matter and includes the changes indicated in the marked-up copy of the original specification.

Respectfully submitted,

  
\_\_\_\_\_  
Gary R. Edwards  
Registration No. 31,824

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